

MASTER FILE

OCT 26 2000



UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, DC 20233-0001

DSSD CENSUS 2000 PROCEDURES AND OPERATIONS MEMORANDUM #C-5

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Subject: Specifications for Identifying Census Continuation Forms and
Setting the Expected Return Population Count on the Decennial
Response File

I. Introduction

These specifications describe those parts of the Decennial Response File (DRF) creation process that link related census forms into census returns and set an expected household return population count for each census return. These processes are completed before the Primary Selection Algorithm (PSA) is applied.

Section II. defines the DRF variables used in carrying out these specifications. A brief description of each variable is also provided. The variable names and descriptions are taken from the 2000 Decennial Census Documentation for the Decennial Response File - Stage 2.

Section III. describes how to set an expected form population count for each census form. A census form is a single census data capture response record (e.g., the response record for a mail return short form questionnaire, Form D-1, or for an enumerator continuation short form, Form D-1(E)SUPP). This expected count is not the final household size. It is an intermediate count that reflects the maximum possible count for each census form. An expected form population count is set for every census form. For some types of census form, a default value of 'Undetermined Pop' is assigned.

The expected form population count set in Section III is an input to the next step of the DRF2 process. This step, described in Section IV., is the linking of related forms to create a census return record. Multiple forms may exist for a single census housing unit

identification number (ID) because an enumerator or respondent has used multiple forms to complete the enumeration of a household. Multiple forms can arise in several ways. During nonresponse followup and coverage improvement followup operations, census enumerators may fill an 'enumerator continuation form' (D-1(E)SUPP, D-2(E)SUPP) which is specifically designed to complete the enumeration when the household size is greater than five persons. Respondents may use a second mail return or a Be Counted Form (BCF) as continuation form even though these forms are not intended for this use. Respondents may also complete more than one BCF to enumerate all the persons in a household.

The linking process identifies continuation forms and the form to which the continuation forms are related. The continuation forms are referred to as child forms and the form to which the child forms are linked is referred to as the parent form. The combination of a parent form and linked child forms to which the parent form is linked is referred to as a census return; it represents a single enumeration of household for a census ID. A census return can consist of a single census form or a parent form and one or more child forms. The census ID number is the key variable in the linking process. Within a census ID, the form type, expected form population count, names on person records and names on rosters are all used to identify forms that should be linked together. When forms are linked, the DRF2 return-level (housing unit level) records for the child forms are dropped from the DRF2 file and the person-level records for the child forms become associated with the return-level record of the parent form.

Once census forms are linked a return status and an expected return population count are set for each census household return. This count represents the expected household size for each census return prior to the PSA. When the PSA selects a census return, the expected return population count set in this pre-PSA DRF2 process is the final household size for the census return, unless the PSA process increases the household size for the census return.

An expected return population count is set for every census return. Group Quarters (GQ) forms (Individual Census Questionnaire, Individual Census Report, Military Census Report, and Shipboard Census Report) and orphan enumerator continuation forms (i.e., enumerator continuation forms that could not be linked to a parent form) are given a return status of 'Occupied' and a expected return population count of 'Undetermined Pop'.

II. Variables and Definitions

A. Listed below are the DRF2 variables referenced in the specifications.

Return Level Housing Unit Record Variables:

RRT -	Record Type (Short or Long Return-level)
RFT -	Form Type
RISPOP -	Interview Summary Item B Pop
RISSTAT -	Interview Summary Item A - Status
RISVAC -	Interview Summary Item C - Vacancy Status
REXPOP -	Expected form pop (After linking this variable is reset so that it reflects the expected return pop)
RCONTN -	Number of Continuation Forms for this Enumeration
RSTATUS -	Housing Unit Status for this Return
RCEPOP -	Coverage Edit Followup (CEFU) Household Pop Count
RNPOP -	Number of People in House or Apartment (reported by respondent)
RBLANK -	“Blank Form” Status of Return
RS3 -	‘Is this a vacation or seasonal home or only occasionally occupied by your household?’
RSOURCE -	Source of Return (Recode)
REPPATE -	Earliest Form Processing Date
RRLN n (n=1 - 12) -	Last Name for Roster Name n
RRFN n (n=1 - 12) -	First Name for Roster Name n
RRSTAT n (n=1 - 12) -	Pre-Audit Resolution DCAR Status of Roster Name

RRVSTAT_n (n=1 - 12) - After Audit Resolution DCAR Status of Roster Name

Person Record Variables:

PDSTAT - Pre-Audit Resolution DCAR Person Status

PDVSTAT - After Audit Resolution DCAR Person Status

B. DCAR Non-Valid person Records and DCAR Non-Valid Roster Names

The DCAR process assigns a pre and a post Audit and Resolution (AR) status variable to each person record and each roster name. The possible values for these variables are valid, invalid, duplicate, cancel and blank. The DCAR status variables for person records and roster names were not set on records that did not undergo the DCAR edit process. Also, the post-AR status is not set for enumerators forms on the DRF2 files.

It is necessary for these specifications to define a status code called DCAR Non-Valid to person records and roster names. The DCAR Non-Valid status code is a recode based on the values of the pre and post AR status variables. The possible values for this recode are 'DCAR Non-Valid' and 'not DCAR Non-Valid'.

DCAR Non-Valid Person Records

DCAR Non-Valid person records (person-level records) are identified by the person-level record variables PDSTAT and PDVSTAT. A person record is DCAR Non-Valid if :

PDSTAT = 0, 1, 2 or 3 and PDVSTAT ≠ 4
OR
PDVSTAT = 0, 1, 2 or 3

DCAR Non-Valid Roster Names

DCAR Non-Valid roster names are identified by the return-level variables RRSTAT01-RRSTAT12 and RRVSTAT01-RRVSTAT12. A roster name is DCAR Non-Valid if :

RRSTAT_n = 0, 1, 2 or 3 and RRVSTAT ≠ 4
OR
RRVSTAT_n = 0, 1, 2 or 3
for n = 01,02,...,12

C. Legitimate Person Records and Legitimate Roster Names

Legitimate Person Records - A person record is Legitimate if all of the following conditions hold:

The person record is *not* DCAR Non-Valid
and
The person-level record is data-defined¹
and
The person-level record is not canceled by CEFU (PCESTAT = *tbd*)
and
The person-level record is not canceled by an enumerator
(PCANCEL = -1)

Legitimate Roster Name - A roster name is Legitimate if both of the following conditions hold:

The roster name is *not* DCAR Non-Valid
and
The roster name consists of 3 or more characters in the first and last name fields combined.

III. Setting the Expected Form Population Count and RSTATUS

At this stage of processing the **expected form population count** is stored in the variable REXPOP. After form linking is completed, REXPOP is updated to reflect the **expected return population count** (see Section V.)

Let DPPOP = The count of Legitimate person records or *not* DCAR Non-Valid person records associated with the census form.

ROSPOP = The count of Legitimate roster names or *not* DCAR Non-Valid roster names on the return-level record for the census form..

When RNPOP or RISPOP is blank (equal to -1) treat it as having a value of zero in the formulas for setting REXPOP.

¹ See Attachment A for a definition of a data-defined person.

Blank Forms

If the form is a blank form. i.e. RBLANK = 1 then set

REXPOP = -1 (Not Computed).

Otherwise, apply the specifications below to set REXPOP.

Short Form Mail Return (RSOURCE = 1 - 10 & RFT = 1,3)

REXPOP = Maximum (RNPOP, (DPPOP+ROSPOP)).

Long Form Mail Return (RSOURCE = 1 - 10 & RFT = 2, 4)

REXPOP = Maximum (RNPOP, DPPOP, ROSPOP).

Enumerator Form (RSOURCE = 13 -25 & RFT = 5, 6)

REXPOP = Maximum (RNPOP, DPPOP, RISPOP)

Be Counted Form (BCF) - Whole & Partial Household (RSOURCE = 11, 12, & 32, 33 and RFT = 7)

REXPOP = DPPOP + ROSPOP

Internet Short Form (RSOURCE = 30)

REXPOP = Maximum (RNPOP, (DPPOP+ROSPOP))

Telephone Questionnaire Assistance (TQA) Reverse-CATI Short Form (RSOURCE = 31)

REXPOP = Maximum (RNPOP, DPPOP)

Coverage Edit Followup Return (RSOURCE = 34 -36)

REXPOP = RCEPOP

Enumerator Continuation Form (RSOURCE= 37) and Enumerator Forms Converted to Continuation Form (RSOURCE = 37 & RFT = 19, 20)

REXPOP = 99 [Undetermined Pop Count]

Group Quarter (GO) Type Forms (RSOURCE = 26 - 29)

REXPOP = 99 [Undetermined Pop Count]

IV. Linking Forms

The forms eligible to be linked to one another are mail return forms (RSOURCE = 01-10 and RFT = 1- 4), enumerator forms and enumerator continuation forms (RSOURCE = 13-25 and RFT = 5-6 & 17-20), and paper Be Counted Forms (RSOURCE = 11, 12 and RFT = 7).

A. Definition of Parent and Child Forms

The linking criteria specify parent and child forms for each step in the linking process. Each set of linked forms will be made up of one parent form and one to three child forms. An example of parent and child forms linked together is an enumerator first form (the parent form) linked to an enumerator continuation form (the child form).

1. Parent Form - This is the form presumed to have a person panel filled for Person 1. The expected household size (REXPOP) from this form is compared to the total number of persons enumerated on each set of child forms that may possibly be linked to the parent form.
2. Child Form - This is the form presumed to contain data for persons not enumerated on the person panels of the parent form but are part of the household enumerated on the parent form.

B. Linking Criteria

The linking of forms is performed only among forms with the same Census ID (i.e., from the same census housing unit). Forms from different census housing units are never linked.

The order of the linking steps listed below reflects the order in which attempts should be made to link forms for an individual census housing unit. In each step, the parent and child forms are defined for a single housing unit. Forms that meet the parent form or child form criteria are the forms considered for linking in that step. Forms other than the parent and child forms may be present under a particular step, but they are not used in deciding which should be linked in that step. Each step may result in more than one set of forms being linked. Repeat each step for a housing unit until no additional sets of parent and child forms can be linked.

Let DPPOP = The count of Legitimate person records or *not* DCAR Non-Valid person records associated with the census form.

Step 1

Parent Form - Enumerator First Form (RSOURCE = 13 -25 & RFT = 5, 6)

Parent forms must meet the following conditions:

RFT = 5, 6
and
RSOURCE = 13 - 25
and
REXPOP > DPPOP

Child Form - Enumerator Continuation Form (RSOURCE = 37 & RFT = 17-20)

Child forms must meet the following conditions:

RFT = 17 - 20
and
RSOURCE = 37

- a. If there is only one eligible parent form, let Total Pop = sum of DPPOP for the parent form and all eligible child forms. If $REXPOP_{parent} \geq \text{Total Pop}$, then link the forms.
- b. If there is more than one eligible parent form, examine each set (combination) of a parent form with one to three child forms. If there is more than one child form, review all combinations of a parent with one child form, all combinations of a parent form with two child forms, all combinations of a parent form with three child forms, as applicable.
- c. Let CNTN = the number of child forms in each set.
- d. Let ALLPOP = the sum of DPPOP for the eligible forms (parent and child forms) in each of the sets identified in Step 1.a.
- e. Identify all sets of forms for which $REXPOP_{parent} \geq \text{ALLPOP}$.
- f. Link the most appropriate set of forms identified in Step 1. d. according to the criteria in Step 1. e. i) - viii) below. If the application of any one of these steps identifies more than one set of forms, only those sets of forms are eligible for

consideration under the subsequent criteria of Step 1.e. All other sets are eliminated from consideration.

- i) If there is only one set of forms that meets the criterion in Step 1.d, link that set of forms.
- ii) If there is more than one set of forms that meets the criterion in Step 1.d, link the set for which $REXPOP_{parent} = ALLPOP$.
- iii) If none or more than one set of forms meets the conditions in Step 1.e. ii), link the set of forms for which a surname of a valid person panel on each of the child form(s) matches a surname from the valid person panels of the parent form.²
- iv) If none or more than one of the set meets the criterion in Step 1.e. iii), link the set of forms for which $RCONTN_{parent} = CNTN$.
- v) If none or more than one of the sets meets the criterion in step 1.e. iv), link the set of forms for which have the same value of RRT on all forms in the set.
- vi) If none or more than one of the sets meets the criterion in Step 1.f. v), link the set of forms which has the largest value of ALLPOP.
- vii) If there is a tie in the largest value of ALLPOP, link the set of forms with the closest agreement in REPDAT between parent form and child form(s)³.
- viii) If more than one set of forms is eligible to be linked at the completion of Step 1. vii), randomly choose one of the eligible sets and link the chosen set.

² The SRD string comparator will be used to identify matches.

³ The agreement between two REPDAT dates is measured by the number of calendar days between the two dates. If there are three or more forms in a set, the use the minimum number of days between the REPDAT dates of any two forms in the set as the measure of agreement for that set.

Step 2

Parent Form - Mail Return Form (RSOURCE = 1 -10 & RFT = 1-4)

Parent forms must meet the following criteria:

RFT = 1 - 4
and
RSOURCE = 1-10
and
REXPOP > DPPOP

Child Form - Enumerator Continuation Form (RSOURCE = 37 & RFT = 17-20)

Child forms must meet the following criteria:

RFT = 17 - 20
and
RSOURCE = 37

- a. If there is at least one enumerator first form (RSOURCE = 13 -25 & RFT = 5, 6) present for this census ID, skip this step. Otherwise, continue.
- b. If there is only one eligible parent form, let Total Pop = sum of DPPOP for the parent form and all eligible child forms. If $REXPOP_{parent} \geq \text{Total Pop}$, then link the forms.
- c. If there is more than one eligible parent form, examine each set (combination) of a parent form with one to three child forms. If there is more than one child form, review all combinations of a parent with one child form, all combinations of a parent form with two child forms, all combinations of a parent form with three child forms, as applicable.
- d. Let ALLPOP = the sum of DPPOP for the eligible forms (parent and child forms) in each of the set forms identified in Step 3.b.
- e. Identify all sets of forms for which $REXPOP_{parent} \geq \text{ALLPOP}$.
- f. Link the most appropriate set of forms identified in Step 3.c. according to the criteria in Step 3.d. i) - vi) below. If the application of any one of these steps identifies more than one set of forms, only those sets of forms are eligible for consideration under the subsequent criteria of Step 3.d. All other sets are eliminated from consideration.

- i) If only one set of forms meets the criterion in Step 3.d, link that set of forms.
- ii) If more than one sets of forms meets the criterion in step 3.d, link the set of forms for which a surname of a valid person panel on the each of the child form(s) matches a surname from the valid person panels or the valid roster entries of the parent form.
- iii) If none or more than one sets of forms meets the criterion in Step 3.d. ii), link the set of forms which has the largest value of ALLPOP.
- iv) If there is a tie in the value of ALLPOP, link the set of forms for which the parent and child forms all have the same form length (RRT).
- v) If none or more than one form meets the condition in Step 3.e. iv), link the set of forms with closest agreement in REPDATE between parent form and child form(s).
- vi) If more than one set of forms is eligible to be linked at the completion of Step 3.e. v), randomly choose one of the eligible sets and link the chosen set.

Step 3

Parent Form - Mail Return Form (RSOURCE = 1-10 & RFT = 1-4)

Parent forms must meet the following criteria:

RFT = 1- 4
and
RSOURCE = 1-10
and
REXPOP > DPPOP

Child Form - Enumerator First Form (RSOURCE = 13 -25 & RFT = 5, 6)

Child forms must meet the following criteria:

RFT = 5, 6
and
RSOURCE = 13 - 25

- a. If there is only one eligible parent form, let Total Pop = sum of DPPOP for the parent form and all eligible child forms. If $REXPOP_{parent} \geq \text{Total Pop}$, then link the forms.
- b. If there is more than one eligible parent form, examine each set (combination) of a parent form with one to three child forms. If there is more than one child form, review all combinations of a parent with one child form, all combinations of a parent form with two child forms, all combinations of a parent form with three child forms, as applicable.
- c. Let ALLPOP = the sum of DPPOP for the eligible forms (parent and child forms) in each of set forms identified in Step 4.a.
- d. Identify the sets of forms that meet the following criteria:

- i) Short form parent

$$REXPOP_{parent} \geq ALLPOP$$

and

Each name (first and last names) of a valid person panel on the child form(s) matches a valid name from continuation roster of the parent form.

- ii) Long form parent

$$REXPOP_{parent} \geq ALLPOP$$

and

Each name (first and last names) of a valid person panel on the child form(s) matches a valid name on the roster of the parent form and does not match the name of any valid person panels on the parent form.

- e. Link the most appropriate set of forms identified in Step 4. c. according to the criteria in Step 4.d. i) - iv) below. If the application of any one of these steps identifies more than one set of forms, only those sets of forms are eligible for consideration under the subsequent criteria of Step 4.d. All other sets are eliminated from consideration.
 - i) If only one set of forms meets the criterion in Step 4.c., link that set of forms.
 - ii) If more than one sets of forms meets the criteria Step 4.c., link the set of forms which has the largest value of ALLPOP.
 - iii) If there is a tie in the value of ALLPOP, link the set of forms with the

closest agreement in REPDATE between parent form and child form(s).

- iv) If more than one set of forms is eligible to be linked at the completion of Step 4. iii), randomly choose one of the eligible sets and link the chosen set.

Step 4

Parent Form - Mail Return Form (RSOURCE = 1-10 & RFT = 1-4)

Parent forms must meet the following criteria:

RFT = 1 - 4
and
RSOURCE = 1-10
and
REXPOP > DPPOP

Child Form - Mail Return Form (RSOURCE = 1-10 & RFT = 1-4)

Child forms must meet the following criteria:

RFT = 1 - 4
and
RSOURCE = 1 - 10

- a. If there is only on eligible parent form, let Total Pop = sum of DPPOP for the parent form and all eligible child forms. If $REXPOP_{parent} \geq \text{Total Pop}$, then link the forms.
- b. If there is more than on eligible parent form, examine each set (combination) of a parent form with one to three child forms. If there is more than one child form, review all combinations of a parent with one child form, all combinations of a parent form with two child forms, all combinations of a parent form with three child forms, as applicable.
- c. Let ALLPOP = the sum of DPPOP for the eligible forms (parent and child forms) in each of set forms identified in Step 5.a.

d. Identify the sets of forms that meet the following criteria:

i) Short form

$$\text{REXPOP}_{\text{parent}} \geq \text{ALLPOP}$$

and

The parent and all child form(s) are short forms (RRT = 2)

and

Each name (first and last names) of a valid person panel on the child form(s) matches a valid name from continuation roster of the parent form.

ii) Long form

$$\text{REXPOP}_{\text{parent}} \geq \text{ALLPOP}$$

and

The parent and all child form(s) are long forms (RRT = 3)

and

Each name (first and last names) of a valid person panel on the child form(s) matches a valid name on the roster of the parent form and does not match the name of any valid person panels on the parent form.

e. Link the most appropriate set of forms identified in Step 5. c. according to the criteria in Step 5. d. i) - iv) below. If the application of any one of these steps identifies more than one set of forms, only those sets of forms are eligible for consideration under the subsequent criteria of Step 5.d. All other sets are eliminated from consideration.

- i) If only one set of forms meets the condition in Step 5.c, link that set of forms.
- ii) If more than one sets of forms meets the criteria in Step 5.c , link the set of forms which has the largest value of ALLPOP.
- iii) If there is a tie in the value of ALLPOP, link the set of forms with the closest agreement in REPDATE between parent form and child form(s).
- iv) If more than one set of forms is eligible to be linked at the completion of Step 5. iii), randomly choose one of the eligible sets and link the chosen set.

Step 5

Parent Form - BCE_{whole} (RSOURCE = 11 & RFT = 7)

Parent forms must meet the following criteria:

RFT = 7
and
RSOURCE = 11
and
REXPOP > DPPOP

Child Form - BCE_{partial} (RSOURCE = 12 & RFT = 7)

Child forms must meet the following criteria:

RFT = 7
and
RSOURCE = 12

- a. If there is only one eligible parent form, let Total Pop = sum of DPPOP for the parent form and all eligible child forms. If $REXPOP_{parent} \geq \text{Total Pop}$, then link the forms.
- b. If there is more than one eligible parent form, examine each set (combination) of a parent form with one to three child forms. If there is more than one child form, review all combinations of a parent with one child form, all combinations of a parent form with two child forms, all combinations of a parent form with three child forms, as applicable.
- c. Let ALLPOP = the sum of VPOP for the eligible forms (parent and child forms) in each of set forms identified in Step 6.a.
- d. Identify the sets of forms that meet the following criteria:

$REXPOP_{parent} \geq \text{ALLPOP}$
and

Each name (first and last names) of a valid person panel on the child form(s) matches a valid name from the continuation roster of the parent form⁴.

⁴ The SRD string comparator will be used to identify matches.

- e. Link the most appropriate set of forms identified in Step 6. c. according to the criteria in Step 6.d. i) - iv) below. If the application of any one of these steps identifies more than one set of forms, only those sets of forms are eligible for consideration under the subsequent criteria of Step 6.d. All other sets are eliminated from consideration.
 - i) If only one set of forms meets the criteria in step 6.c, link that set of forms.
 - ii) If more than one sets of forms meets the criteria in step 6.c, link the set of forms which has the largest value of ALLPOP.
 - iii) If none or more than one form meets the condition in Step 6.d. ii), link the set of forms with closest agreement in REPDAT between parent form and child form(s).
 - iv) If more than one set of forms is eligible to be linked at the completion of Step 6.d. iii), randomly choose one of the eligible sets and link the chosen set.

Step 6

Parent Form - Mail Return Form (RSOURCE = 1-10 & RFT = 1-4)

Parent forms must meet the following criteria:

RFT = 1 - 4
and
RSOURCE = 1-10
and
REXPOP > DPPOP

Child Form - BCF_{partial} (RSOURCE = 12 & RFT = 7)

Child forms must meet the following criteria:

RFT = 7
and
RSOURCE = 12

- a. If there is only on eligible parent form, let Total Pop = sum of DPPOP for the parent form and all eligible child forms. If $REXPOP_{parent} \geq \text{Total Pop}$, then link the forms.

- b. If there is more than one eligible parent form, examine each set (combination) of a parent form with one to three child forms. If there is more than one child form, review all combinations of a parent with one child form, all combinations of a parent form with two child forms, all combinations of a parent form with three child forms, as applicable.
- c. Let ALLPOP = the sum of DPPOP for the eligible forms (parent and child forms) in each of set forms identified in Step 7.a.
- d. Identify the sets of forms that meet the following criteria:

$$\text{REXPOP}_{\text{parent}} \geq \text{ALLPOP}$$

and

Each name (first and last names) of a valid person panel on the child form(s) matches a valid name from the continuation roster of the parent form.

- e. Link the most appropriate set of forms identified in Step 7.c. according to the criteria in Step 7.d. i) - iv) below. If the application of any one of these steps identifies more than one set of forms, only those sets of forms are eligible for consideration under the subsequent criteria of Step 7.d. All other sets are eliminated from consideration.
 - i) If only one set of forms meets the criteria in Step 7.c, link that set of forms.
 - ii) If more than one sets of forms meets the criteria in Step 7.c, link the set of forms which has the largest value of ALLPOP.
 - iii) If none or more than one form meets the criteria in Step 7.d. ii), link the set of forms with the closest agreement in REPDAT between parent form and child form(s).
 - iv) If more than one set of forms is eligible to be linked at the completion of Step 7.d. iii), randomly choose one of the eligible sets and link the chosen set.

V. Setting the Expected Return Population Count (REXPOP) and RSTATUS

The value of REXPOP is updated after form linking is completed. At this point, REXPOP becomes the **expected return population count**. The variable RSTATUS specifies the occupancy status of the return (i.e. occupied, vacant, delete or undetermined). RSTATUS is dependent on the value of REXPOP.

When RNPOP or RISPOP is blank (equal to -1) or is equal to 98 or 99, treat it as having a value of zero in the formulas for setting REXPOP.

Let DPPOP = The count of Legitimate person records or *not* DCAR Non-Valid person records associated with the census form.

 ROSPOP = The count of Legitimate roster names or *not* DCAR Non-Valid roster names on the return-level record for the census form..

 ALLPOP = The count of Legitimate person records or *not* DCAR Non-Valid person records on all forms associated with all the census return. This is the sum of DPPOP for the parent form and all child forms linked to the parent form.

Short Form Mail Return (RSOURCE = 1 - 10 & RFT = 1,3)

Let TOTPOP = (DPPOP + ROSPOP) from parent form

 MAXP = Maximum (TOTPOP+6, ALLPOP+6)

Setting REXPOP:

- If RNPOP = blank and TOTPOP = 0, set
 REXPOP = 100 [Status Undetermined]
- If there are child forms linked to this return, then do the following:

 Set REXPOP = Maximum (TOTPOP, ALLPOP, Minimum(RNPOP, MAXP))
- If there are no child forms linked to this return and there are names on the continuation roster, set
 REXPOP = Maximum (TOTPOP, Minimum(RNPOP, TOTPOP+6))
- If there are no child forms linked to this return and there are no names on the continuation roster, then do the following:

 If RNPOP > 6, set REXPOP = TOTPOP
 or
 If RNPOP ≤ 6, set REXPOP = Maximum (TOTPOP, RNPOP)

Setting RSTATUS:

- If $0 < \text{REXPOP} < 98$, then $\text{RSTATUS} = 1$ [Occupied]
- If $\text{REXPOP} = 100$ [Status Undetermined],
set $\text{RSTATUS} = 4$ [Undetermined (Occ./Vac.)]
- If $\text{REXPOP} = 0$, set $\text{RSTATUS} = 2$ [Vacant]

Long Form Mail Return (RSOURCE = 1 - 10 & RFT = 2, 4)

Let $\text{TOTPOP} = \text{Maximum}(\text{DPPOP}, \text{ROSPop})$ from parent form

Setting REXPOP:

- If $\text{RNPOP} = 0$ or blank and $\text{TOTPOP} = 0$, set
 $\text{REXPOP} = 100$ [Status Undetermined]
- If there is one or more child forms linked to this return, then do the following:

Let $\text{MAXP} = \text{Maximum}(\text{TOTPOP}+6, \text{ALLPOP}+6)$.
Set $\text{REXPOP} =$
 $\text{Maximum}(\text{TOTPOP}, \text{ALLPOP}, \text{Minimum}(\text{RNPOP}, \text{MAXP}))$.
- If there are no child forms linked to this return, then do the following:

If $\text{RNPOP} > 6$, set $\text{REXPOP} = \text{TOTPOP}$
or
If $\text{RNPOP} \leq 6$, set $\text{REXPOP} = \text{Maximum}(\text{TOTPOP}, \text{RNPOP})$

Setting RSTATUS:

- If $0 < \text{REXPOP} < 98$ then $\text{RSTATUS} = 1$ [Occupied]
- If $\text{REXPOP} = 100$ [Status Undetermined],
set $\text{RSTATUS} = 4$ [Undetermined (Occ./Vac.)]
- If $\text{REXPOP} = 0$, set $\text{RSTATUS} = 2$ [Vacant]

Enumerator Form (RSOURCE = 13 -25 & RFT = 5, 6)

If ALLPOP = 0 and RS3 = 1 (Yes) and RISVAC = 4 (seasonal or occasional use),
set RSTATUS = 2 [Vacant]
and
REXPOP = 0

Otherwise, use the variables DPPOP, ROSPOP, ALLPOP and the DRF2 variables RISSTAT, RISPOP, and RISVAC to determine the values of REXPOP and RSTATUS. The tables in Attachment B specify the value of RSTATUS and whether or not REXPOP can be set based these variables. When *Set Count* appears in the REXPOP column of Attachment B, set REXPOP as follows:

- If there is at least one child form linked to the parent, or if RCONT = 1, or there is one or more orphan enumerator continuation forms present for the ID, then set REXPOP = Maximum (ALLPOP, Minimum(RISPOP, ALLPOP+6)) .
- If there are no child forms linked to the parent and RCONT = -1 and there are no orphan enumerator continuation forms present for the ID, do the following:

If RISPOP ≤ 5 or blank, set REXPOP = Maximum (RISPOP, DPPOP)

or

If RISPOP > 5 and RNPOP > 5 , set

REXPOP = Minimum (RISPOP, DPPOP+6)

or

If RISPOP > 5, but RNPOP ≤ 5 , set

REXPOP = Maximum (RNPOP, DPPOP)

Be Counted Form (BCF) - Whole Household (RSOURCE = 11 & RFT = 7, and RSOURCE = 32)

This section applies to paper BCFs and Telephone Questionnaire Assistance reverse CATI BCFs .

Setting REXPOP:

- If DPPOP+ROSPOP = 0 set REXPOP = 100 [Status Undetermined]
- If there is at least one child form linked to the parent, set REXPOP = Maximum (DPPOP+ROSPOP, ALLPOP).
- If there are no child forms linked to the parent, set REXPOP = DPPOP + ROSPOP

Setting RSTATUS:

- If REXPOP = 100 [Status Undetermined],
set RSTATUS = 7 [Undetermined (Occ/Vac/Del.)]
- If $0 < \text{REXPOP} < 100$, RSTATUS = 1 [Occupied]

Be Counted Form (BCF) - Partial (RSOURCE = 12 & RFT = 7 and RSOURCE = 33)

This section applies to paper BCFs and Telephone Questionnaire Assistance reverse CATI BCFs .

Setting REXPOP:

- If $\text{DPPOP} + \text{ROSPOP} = 0$ set REXPOP = 100 [Status Undetermined]
- Otherwise, set $\text{REXPOP} = \text{DPPOP} + \text{ROSPOP}$

Setting RSTATUS:

- If REXPOP = Status Undetermined,
set RSTATUS = 7 [Undetermined (Occ/Vac/Del.)]
- If $\text{REXPOP} > 0$, set RSTATUS = 1 [Occupied]

Internet Short Form (RSOURCE = 30)

Let $\text{TOTPOP} = (\text{DPPOP} + \text{ROSPOP})$ from parent form

$\text{MAXP} = \text{Maximum}(\text{TOTPOP} + 6, \text{ALLPOP} + 6)$

Setting REXPOP:

- If $\text{RNPOP} = 0$ or blank and $\text{TOTPOP} = 0$, set
 $\text{REXPOP} = 100$ [Status Undetermined]
- If there are names on the continuation roster, set
 $\text{REXPOP} = \text{Maximum}(\text{TOTPOP}, \text{Minimum}(\text{RNPOP}, \text{TOTPOP} + 6))$

- If there are no names on the continuation roster, then do the following:
 If $RNPOP > 6$ and $TOTPOP > 0$, set $REXPOP = TOTPOP$
 or
 If $RNPOP > 6$ and $TOTPOP = 0$, set $REXPOP = 99$ [Undetermined Pop]
 or
 If $RNPOP \leq 6$, set $REXPOP = \text{Maximum}(TOTPOP, RNPOP)$

Setting RSTATUS:

- If $0 < REXPOP < 100$, set $RSTATUS = 1$ [Occupied]
- If $REXPOP = 0$ or 100 [Status Undetermined], set
 $RSTATUS = 4$ [Undetermined (Occ./Vac.)]

**Telephone Questionnaire Assistance (TOA) Reverse-CATI Short Form
(RSOURCE = 31)**

Setting REXPOP:

- $REXPOP = DPPOP$

Setting RSTATUS:

- If $REXPOP = 0$, set $RSTATUS = 2$ [Vacant]
- If $REXPOP > 0$, set $RSTATUS = 1$ [Occupied]

Coverage Edit Followup Return - (RSOURCE = 34-36)

Setting REXPOP:

- $REXPOP = RCEPOP$

Setting RSTATUS:

- If $REXPOP = 0$, set $RSTATUS = 2$ [Vacant]
- If $REXPOP > 0$, set $RSTATUS = 1$ [Occupied]

**Enumerator Continuation Form (RSOURCE= 37) and
Enumerator Forms Converted to Continuation Form (RSOURCE = 37 &
RFT = 19, 20)**

REXPOP = DPPPOP

RSTATUS = 1 [Occupied]

Group Quarter (GO) Type Forms (RSOURCE = 26 - 29)

REXPOP = 99 [Undetermined Pop]

RSTATUS = 1 [Occupied]

VI. Product Review

The Decennial Statistical Studies Division (DSSD) performed a product review of the DRF process software to verify that the requirements specified in this document are accurately implemented. The DSSD worked closely with the Decennial Systems and Contracts Management Office (DSCMO) to test those aspects of the DRF process software covered by these specifications. The testing of the PSA stage of the DRF process was carried out independently of this review. This product review did not attempt to verify the accuracy of the DRF process software concerning processes that precede or follow the stage of the DRF process addressed by these specifications.

The test data produced by the DSSD reflected the situations addressed by the requirements contained in these specifications. The test data provided to DSCMO was in the format of the DRF file structure. The DSCMO applied the DRF process software to the test data and provided the DSSD with output data in the format of the DRF file structure. The DSSD reviewed the output data and provided feedback to the DSCMO.

cc:

DSSD Census 2000 Procedures and Operations Memorandum Distribution List
Ellen Katzoff (DSCMO)